

AVIATION

MARCH 6, 1922

Issued Weekly

PRICE 15 CENTS



Aerial View of Monaco—the Scene of Numerous Soapplane Races

VOLUME XII
Number 10

SPECIAL FEATURES

THE LIGHTER-THAN-AIR SITUATION
AERONAUTICAL CHAMBER OF COMMERCE ELECTION
AIRSHIP TRANSPORT COMPANY ORGANIZED
EUROPEAN AIR LINE REQUIREMENTS

Four
Dollars
a Year

THE GARDNER, MOFFAT CO., Inc.
HIGHLAND, N. Y.
225 FOURTH AVENUE, NEW YORK

Entered as Second-Class Matter, Nov. 22, 1920, at the Post Office at Highland, N. Y.



Can You Fly?

The very fact that you have this publication in hand is evidence that you are interested in aviation.

The question then is *Can You Fly?* If you cannot fly, but have ever entertained a desire to do so, this message should be of intense interest to you.

Why Not Learn?

Aviation is here to stay — and it has a future even brighter than many imagine. Already, greater strides are being made than most people are aware. Our training of Pilots, which was discontinued on America's entrance into the late war, has been resumed — and with facilities such as were never before known.

SEND FOR BOOKLET IF INTERESTED

If the above thoughts appeal to you, address our School Division for further information. There will be no obligation at all and we have a complete new booklet on this particular subject, which is free for the asking. Even if you should decide you would not care for it for yourself, why not send for it for someone else? Many likely young men might be glad to know of just such an opportunity as this and would appreciate your putting them in touch with it.

DAYTON WRIGHT COMPANY

SCHOOL DIVISION

DAYTON, OHIO, U. S. A.

"The birthplace of the airplane"



GENERAL
MOTORS



MARCH 6, 1922

AVIATION

VOL. XII, NO. 10

Member of the Audit Bureau of Circulations

CONTENTS

Editorial	276	Speed Outstrips SES	290
The Lighter-than-Air Situation	280	The Ambulance Airplane	290
Notes to Aviators	282	Progress in Training Student Officers	290
Accumulated Chamber of Commerce Election	283	Certificates of Achievement	291
General Air Service Organized	285	Changes in Air Mail Personnel	291
U. S. Chamber of Commerce on Air Legislation	286	Do not Miss DOD's	291
Respective Air Loss Reports	287	New Air Mail Hanger at Camp Field	292
The Air Mail before the Senate	288	15th Observation Squadron	292
"Who's Who in American Aviation"	289	Municipal Airplane at Spokane	292
North Coast on Aircraft Carriers	290	Foreign News	292
Trigline Assigned to 96th Squadron	290		

THE GARDNER, MOFFAT COMPANY, Inc., Publishers
HIGHLAND, N. Y.
225 FOURTH AVENUE, NEW YORK

Subscription price: Four dollars per year. Single copies fifteen cents. Canada, five dollars. Foreign, six dollars a year. Copyright 1922, by the Gardner, Moffat Company, Inc.

Entered every Monday. Form close ten days previously. Entered as second-class matter Nov. 22, 1910, at the Post Office at Highland, N. Y., under act of March 3, 1879.

THOMAS-MORSE AIRCRAFT CORPORATION



Thomas-Morse Training 2-Engine in flight over Hudson, N. Y.

THOMAS-MORSE AIRCRAFT CORPORATION



Going to Press

The photograph here shows a battery of the special glue presses for joining laminated wood parts. This careful lamination produces a unit infinitely stronger and more enduring than could possibly be shaped from a single piece of wood, while still preserving the important lightness and resiliency which are inherent to wood.

The process calls for the most careful work, the best of materials, and ideal conditions in respect to temperature and humidity of the glue room. Science and experience must be combined to secure an unflinching joint of maximum strength.

It is only one detail in the making of a Glenn L. Martin airplane; but it illustrates again the forethought, experience, and care which have placed the Glenn L. Martin planes in a position second to none in America.

THE GLENN L. MARTIN COMPANY
CLEVELAND

Member of the Manufacturers Aircraft Association

L. D. GARBER, PRESIDENT
W. D. HARVEY, VICE-PRESIDENT
W. J. STANLEY, TREASURER
GEORGE NEWBOLD, SECRETARY-MANAGER

AVIATION

LAWRENCE S. CHRY, EDITOR
VINCENT E. CLARK
LESLIE P. WARDEN
RALPH H. ULLMAN, CONTRIBUTING EDITOR

Vol. XXII

MARCH 6, 1932

No. 39

Lessons from the Roma

AS noted in the case of a big wreck, there are probably several aspects to the case. We hope therefore that the committee investigating the loss of the Roma will go the full length in ascertaining all the different ways in which the disaster could have been prevented. The last tribute to those who died will be to deal frankly and openly with all contributory causes, no matter who or what it may concern. We therefore respectfully suggest that attention be directed to the following questions:

1. Did the Liberty engines develop more thrust than the ship was originally designed for, and if so, how much more?
2. Were the steering surfaces designed to stand up at full power, or if not what precautions were necessary in handling them?
3. Was there such a large purchase on the controls that the reduction and restoration could have been broken by further bending them too far?
4. Was there any faking of the ball, or other indication when the ship left the ground that the control surfaces were out of proper alignment?
5. Were all the engines signalled to stop as promptly as possible after the failure of the controls?
6. What objection can there be to a multiple engine ship to having a master switch in the hands of the chief pilot by which all engines can be instantly cut out?
7. Was ballast released as promptly as possible after the failure of the controls?
8. Was there adequate provision for quickly releasing ballast and fuel?
9. Was it the hydroplanes or the fuel which first caught fire, and in what manner?
10. Could more men have escaped if there had been better exit facilities from the port?
11. Was the ship flying at a safe altitude, considering its size and speed?
12. Were there competent authorities from the design staff of the Roma in consultation during the assembly and trials of the ship in this country?

Commercial Aviation in America

PERHAPS the most encouraging sign of the present year with regard to commercial aviation is the remarkable responsiveness in the activities of Aeromarine Airways in Florida. The list of passengers carried during the last few weeks by the flying boats of the "Black Bird Fleet"—as the company is called on account of its home mark—includes many names prominent in the world of finance, industry and sports. This affords an interesting indication of the attitude the high-class traveling public is beginning to take in regard to public air transport.

The skepticism concerning the practicability of air travel, which was well nigh universal only a year or so ago, is gradually being displaced by a more comprehensive of the subject. Surely, but surely, the idea is gaining ground that air travel is a means of transit at least as safe as any other means of communication, while at the same time the amount of time saved, and the exhilaration felt, in air travel are beginning to be more fully appreciated.

The remarkable change in the attitude of the public is relatively due to a continued practical demonstration of the safety of flying, for it could not come about in any other manner. In demonstrating this fact to the public, Aeromarine Airways has furnished far more than its share, if one considers the peculiar demonstration of "wild" flying contributed by "wing walkers" and other aerial acrobats.

If, as we hope, the House follows the advice of the Senate, and induces the Wideman-Hicks bill, there will become available a government sponsor for representing the kind of flying which is distinctly harmful to the best interests of American civil aviation.

Guiding Airplanes through Fog

AN interesting device for guiding airplanes through fog and thick weather has recently been fitted with success in France. This device, invented by M. Lech, briefly consists in establishing along an airway a ground wire through which an alternative high-frequency current is sent. The magnetic field created by this wire is detected on board the airplane by radio direction finders which indicate with remarkable precision the vertical and horizontal angles between the course of the airplane and the ground wire.

It will readily be seen that by means of this device a pilot flying in fog is enabled to determine not only whether he is drifting off his course, but also his vertical distance from the wire. Therefore, if such a wire is so established as to follow the contours of the ground, flying in fog across mountainous country becomes practicable, for the radio detector will constantly show the pilot his height above the wire, and thus he will not have to fear colliding with a mountain top.

Most of the practical difficulties of this system appear to have been overcome, for it is officially announced that a section of the Paris London airway is shortly to be equipped with the Lech "guide-cable" as the device is called. Not the least interesting point about this device is that it only requires a ground wire of small diameter, and that it can be mounted on existing telegraph poles. The expense involved is thus small in comparison with the services it is called upon to render. The practical demonstration of the Lech guide cable will therefore be watched with considerable interest.

Foreign News

Argentina

A call for bids has been received from the Argentine Director General of Navigation and Ports for 4 seaplanes, with two extra motors, spare parts, etc., to be used on the Bermejo River. The seaplanes must have a carrying capacity of 8 persons, seated, including the pilot, in addition to a mechanic. Delivery must be made in Buenos Aires within five months after award has been made.

Brazil

According to a correspondent of the *London Times*, the President of Brazil has given his assent to an Act authorizing the expenditure of over £235,000 for the establishment of two aerial routes between the capital and Porto Alegre (in Rio Grande Do Sul). The one route, which is for seaplanes, will follow the coast while the other will be inland, following the railways where possible. The routes are to be inaugurated before the opening of the Centennial Exhibition next September. Their primary object is military defense, but the routes may be used for commerce, with the Government's consent. Wireless telephone and telegraph stations with a range of 300 miles are to be established at convenient points at a minimum distance of 190 miles apart, and at the terminal points there will be powerful plants capable of direct intercommunication. Modern meteorological stations are also included in the scheme.

England

The report of the Director of Medical Services, Col. M. H. G. Fell, Royal Air Force, for 1920 gives the number of flying accidents during the year as 71, of which number 39 occurred in the United Kingdom and 32 overseas, resulting in 14 deaths at home and 15 overseas. There was only one accident among the cadets, which was not of a serious nature, and a single death occurred among the N.C.O. observers.

France

Two French airmen, MM. Deulin and de Marmier, have mapped out the Paris-Constantinople air route by their initial flight out and back in 35 hr. of actual flying. After leaving Paris they made long halts at Strasbourg, Prague, Budapest, Belgrade and Bukarest. The distance of 1,770 miles from Paris to Constantinople was covered in 17 hr. of effective flight. The return journey from Constantinople to Paris was made in 18 hr. of actual flight.

Siam

During his "round-the-world" journeying, Lord Northcliffe made a stay at Bangkok, and on Dec. 23 he visited the air-drome at Don Muang, where Sir Ross Smith alighted during his Australian flight in 1919. The London Times correspondent states that Lord Northcliffe was surprised to find the air station equal to most of those in Europe. Siam, he states, has 25 landing places and five airdromes. At Don Muang there are 115 planes, including school machines and a staff of 650 men.

Switzerland

The Swiss Government has decided to increase the financial help that it is giving to civil aviation, and is prepared to assist in the establishment next year of a Swiss air mail to connect with international services. In the budget for 1922 the program for subsidizing civil aviation contemplates the increase of the military grant for each service pilot from 200 francs to 400 francs, also provision for grants in aid to enable civil aviation concerns to buy modern transport machines.

Syria

A new air service has been instituted in Syria between Latakia and Homs. Two journeys each way are, according to the *Paris Temps*, made per week, as on the similar services between Aleppo and Deir-Zor, Aleppo and Aintab, and Aleppo and Alexandretta. Services are also to be opened between Damascus and Palmyra and Damascus and Sweida (Hanran). A number of packages were carried on the Levant services, and in November, 31 wounded or sick were evacuated by airplane without accident.

Where to Fly

CALIFORNIA

SAN FRANCISCO, CALIFORNIA
EARL P. COOPER AIRPLANE & MOTOR CO.

ILLINOIS

CHECKERBOARD AIRPLANE SERVICE
FOREST PARK, ILLINOIS

INDIANA

One of the largest and best equipped flying fields in the United States.

CURTISS-INDIANA COMPANY
Kokomo, Indiana
ALL TYPES OF CURTISS PLANES.

MASSACHUSETTS

BOSTON AND SPRINGFIELD, MASS.
EASTERN AIRCRAFT CORP.
340 FIRST ST., BOSTON, MASS.

MINNESOTA

WHITE BEAR LAKE, MINN.
The Twin Cities' chief summer resort.
Harold G. Peterson Aircraft Company
SCHOOL OF AVIATION

NEW JERSEY NEW YORK AIR TERMINAL

800 Acres - 6 miles from Times Square.
Learn on ships that cannot tail spin. Planes rented \$30. hr.
CHAMBERLIN AIRCRAFT
Heshbrouck Heights, N. J.

NEW YORK & NEW JERSEY

CURTISS FIELD, GARDEN CITY, LONG ISLAND
KENILWORTH FIELD, BUFFALO, N. Y.
FLYING STATION, ATLANTIC CITY, N. J.
CURTISS AEROPLANE & MOTOR CORPORATION

NEW YORK

AEROMARINE AIRWAYS, INC.
Times Building, New York
11 Passenger Flying Cruisers - 5 passenger, open and enclosed Flying Boats. Sightseeing Tours - Flights to Shore and Lake Resorts

OHIO

DAYTON, OHIO.

Supplies, Hangars, Shops and Field 1 Mile from Dayton limits.
JOHNSON AIRPLANE & SUPPLY CO.

OREGON

LAND OR WATER FLYING
OREGON, WASHINGTON AND IDAHO AIRPLANE COMPANY
PORTLAND, OREGON

PENNSYLVANIA

Flying School and Commercial Aviation
Send for Circular
Official Flying field Aero Club of Pennsylvania
PHILADELPHIA AERO-SERVICE CORPORATION
636 Real Estate Trust Building, Philadelphia.

WISCONSIN

CURTISS-WISCONSIN AEROPLANE CO.
FLYING SCHOOL
Milwaukee Air Port
GILLES E. MEISENHEIMER
330 Clinton Street Milwaukee, Wis.

If you are one of the companies in your state having first class facilities for passenger carrying, pilots' training and special flights, you should be represented in WHERE TO FLY each week.

26 Consecutive Insertions \$20.00